NetProfiler 2 – SpectroEye Guide

Version 1.0

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1. Download of website

Basically we recommend working with the updated software versions of the particular programs.
Please download the newest versions from the download-section of our website:

http://www.xrite.com/top_support.aspx?lang=en&region=&pageAction=downloads

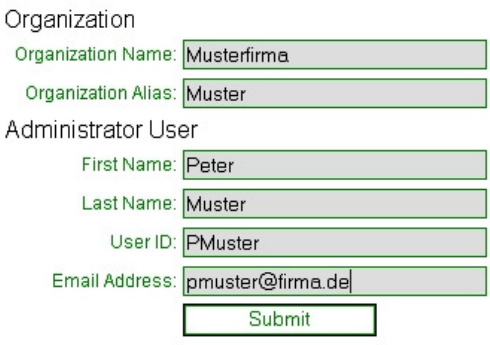
Here you can download the latest version of the software NetProfiler:

http://www.xrite.com/product_overview.aspx?ID=775&Action=support&SoftwareID=535

2. Registration

Before you can work with the software you have to register online.
To do so, please use the following link:

http://netprofiler.services.gretagmacbeth.com/npRegistration/



Name of the company

Shortcut of name

First Name
Name

User name
Email-adress

(please don't use any umlaut!)

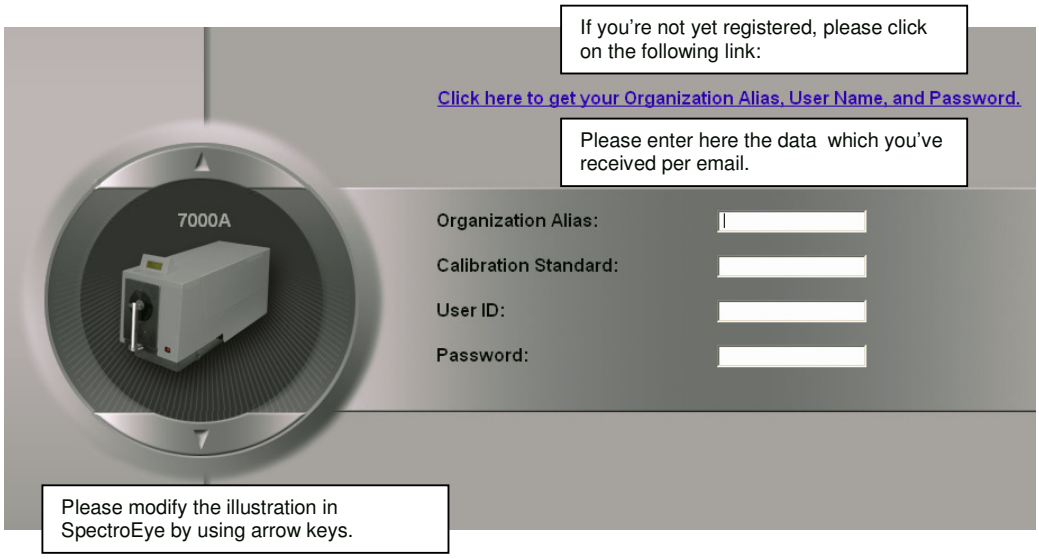
You will receive the answer of the server immediately:

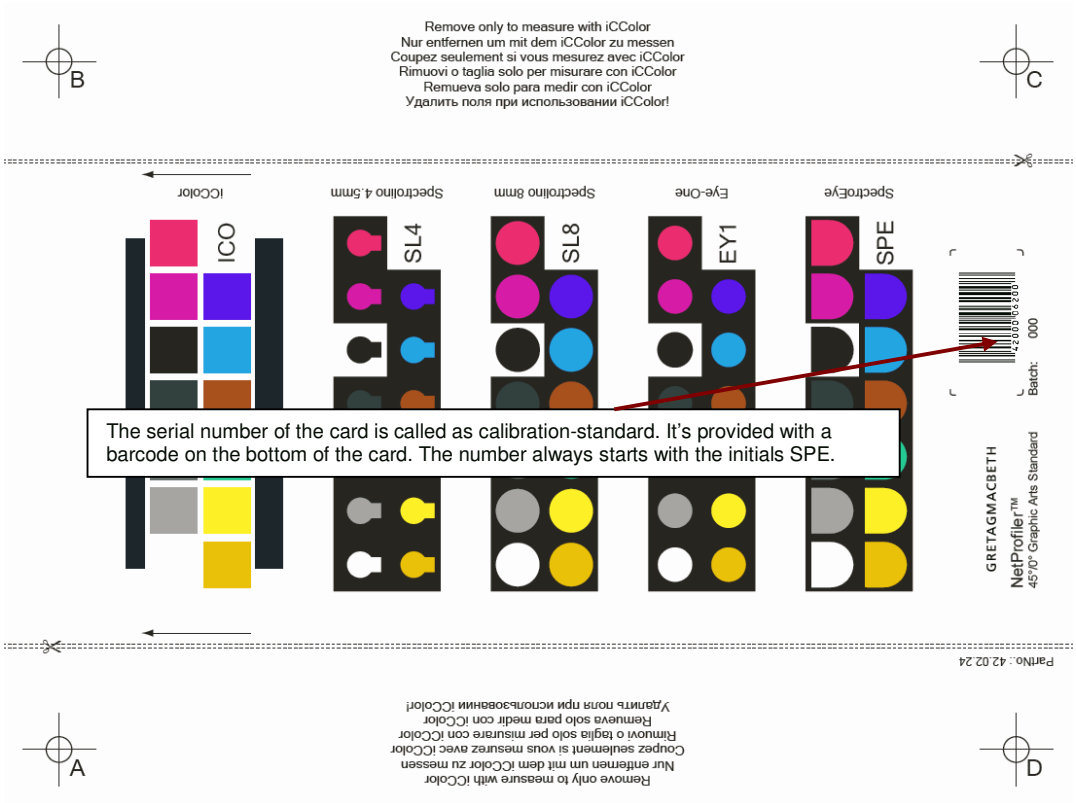
```
Welcome to NetProfiler!  This message is to inform you that your organization
and administrator user account have been created and activated.

Please keep this email in a safe place.

Your Organization Alias, User ID, and password are required to login to both
the NetProfiler web site and the PC application.

Your login information is:
User ID:  PMuster
Password:  xw2qzh4o
Organization Alias:  Muster

Thank you for registering.
```

Please keep these data safe, you'll need them to log-in with the program to the server. You can add more users by yourself on the server.

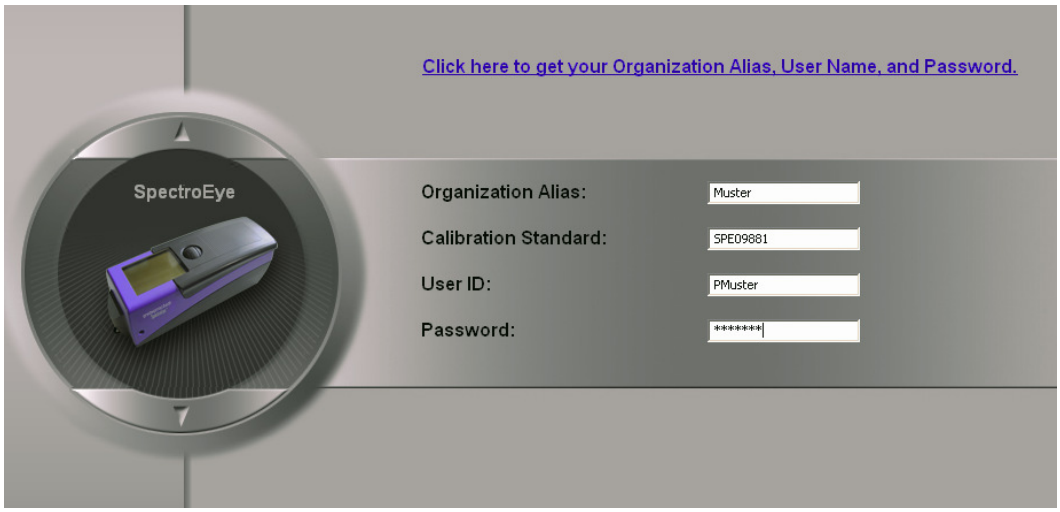
3. Software preparation

To be able to work with the software you have to enter all data of parameter and login. This is necessary only once, but your key word is required every time you login in.

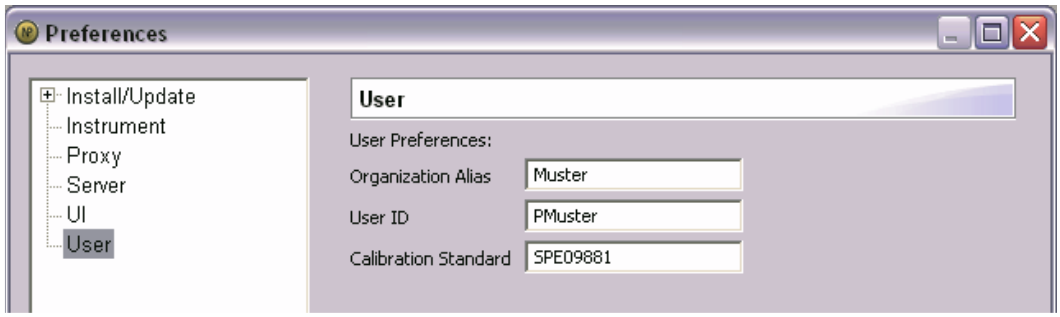

If you're not yet registered, please click on the following link:
Click here to get your Organization Alias, User Name, and Password.
Please enter here the data which you've received per email.
7000A
Organization Alias:
Calibration Standard:
User ID:
Password:
Please modify the illustration in SpectroEye by using arrow keys.



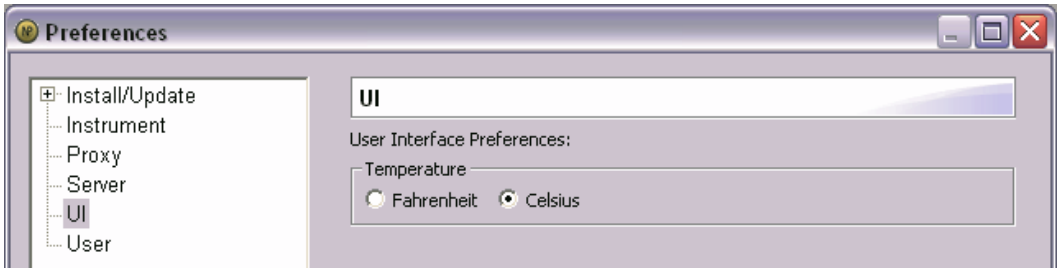
The perfectly filled out mask looks like the following picture:



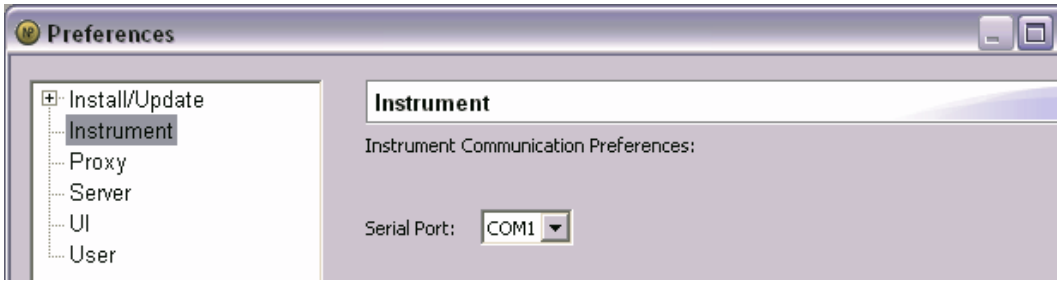
It’s recommended to go to "view", in case of changes or additional parameter.



The start mask automatically adopts the data’s for the user.

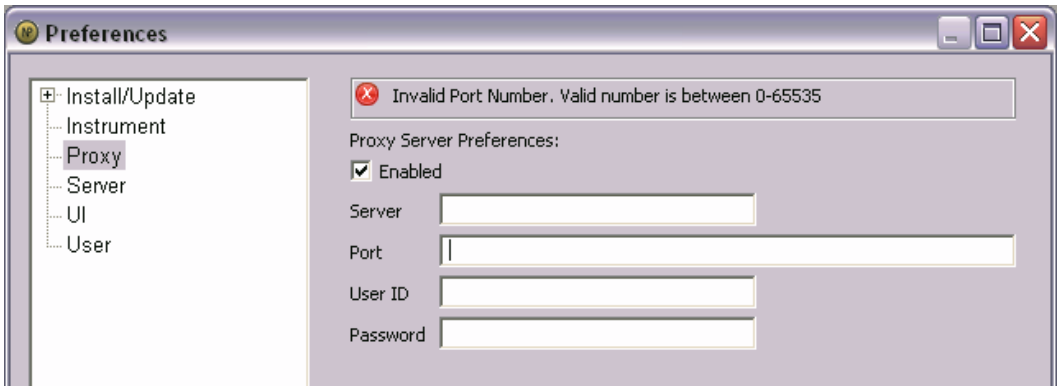


Please change from Fahrenheit to Celsius in the folder "user interface". Standard adjustment is always Fahrenheit.

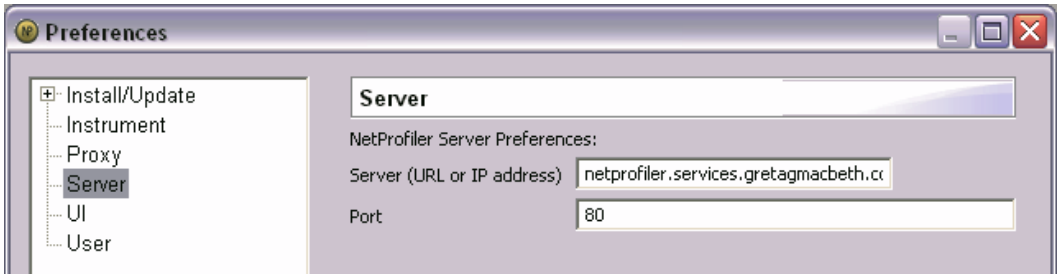


Standard adjustment for the serial access is COM 1. Please adjust here the realistic access. Particularly when it comes to the application from serial to USB adaptors it has to be chosen the correct COM-Port.
(see device manager)

You don't have to change nothing in "Install/Update". Please make sure that you always work with the latest version. You can check this on our website.



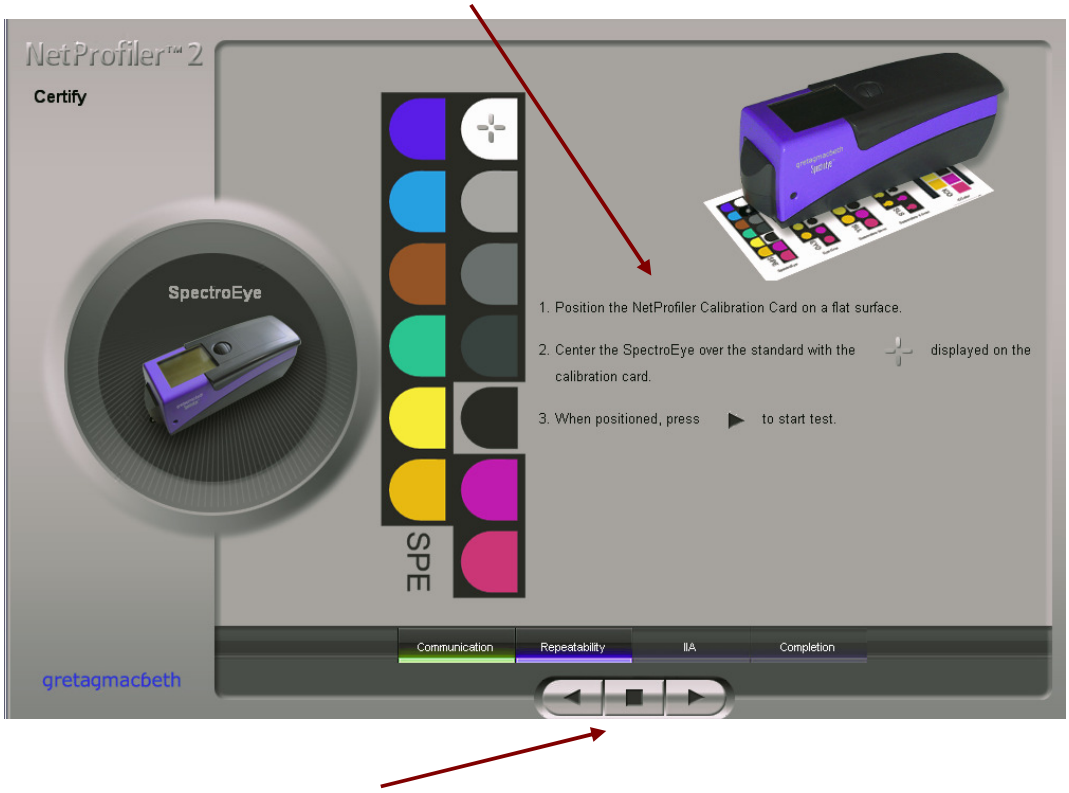
If you use a Proxy-Server, you have to resolve the required settings. We highly recommend you to consult a competent network administrator.



netprofiler.services.gretagmacbeth.com is installed as standard URL and port 80 is used fort he communication to outside. If you should have problems with the connection you can use alternatively the IP 207.242.38.77.
When you activate port 80 in your firewall for this IP, please note that the communication has to occur bidirectional.

4. Control elements

In the right site of the window you'll be managed through each menu and handling point step by step.



The alignment of the handling points in the NetProfiler software is similar to the CD-Player. By pushing the key arrows they move or further or back. In the middle you'll find a button "stop", which breaks the profiling process off and brings you back to the front-page.

You can activate the measurement through the device as well as through the software. We highly recommend you to activate the measurement through the software to avoid a shift of the device as well as an improper positioning which results out of the shift.

5. Options / license account

Here you'll be informed about the residual licenses as well as about the expiry date of the card.
The Calibration Standard SPE09881 is licensed for 25 more uses until 21-Apr-2009.
SpectroEye
Certify
Profile
View Certificate
Load Profile

There are 4 menu items to choose from:

- **Certification**

  During the certification you measure the card just once. The results will be compared with the set point on the server. The dE between the values will be showed on the certificate.

Attention!

There will be no profile created, but you use a license up. Please use the menu item "Profile" to create a profile adjustment for the device.

- **Profile**

  You measure the card twice, the profile adjustment will be saved in the device. You'll receive a certificate with two dE rows.
  The profile has validity for one month and has then to be renewed again.

- **View certificate**

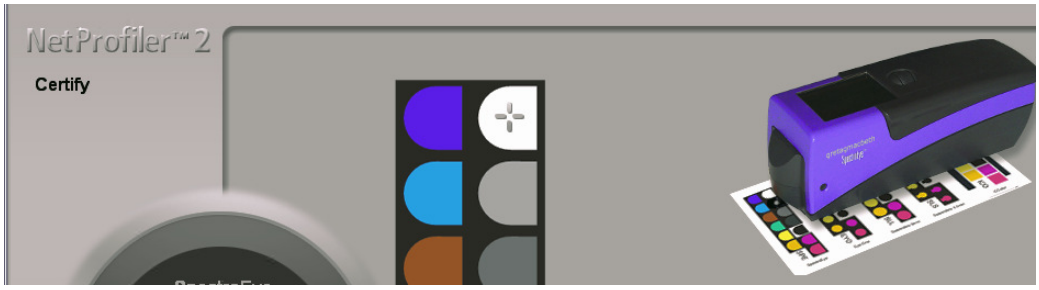
  This menu item shows you the last available certificate of the current instrument.

- **Download profile**

  Downloads the last created profile again into the device.

6. Test of repeatability

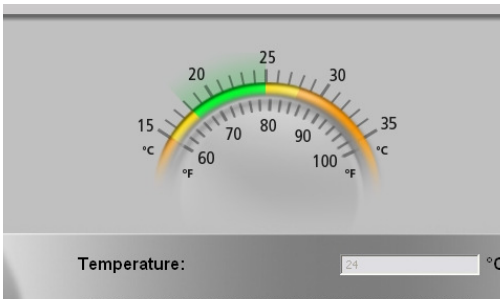
To test the qualification of the device for the NetProfiler, a repeatability test before each certification / profiling has to be arranged. For this 10 measurements are necessary, each one on the white and the blue area.



The average of the color distance of this measurement mustn't exceed a compulsory value. Is it the case anyhow, it would be possible to continue the measurement act, but the certification will always fail.
The device needs to be checked by a service branch. In this case it will not charge you a license.

7. Effect of the temperature

After the passed repeatability measurement the input of the current ambient temperature follows.



Please enter here the real temperature, as in the field of 18 – 28°C a difference of 0.1°C leads to an irregularity of 0.1 dE. The value of the temperature will be charged with the measurement data for the profile creation.

Please profile the device only in an area which fits to the specification of the instrument.

8. Measurement of area and recognition

There is no order in the measurement of the areas. The measured area will be allocated automatically to the reference value with the least color distance.

In case a patch is not recognized it will be marked by a question mark. We recommend you to measure the area again. Please be sure to measure in the middle of the area since this method results in the best accordance with the provided reference.

If the area is still not recognized after the second measurement, you can force the software to adopt the measurement value by selecting the area with the mouse and transacting a measurement.
The area will be showed with a question mark and a check mark.

We highly recommend you to transact the measurement by standing, since it's better for a more specific positioning.

The tolerance for the identification of an area is a color distance of dE3.
Only three areas are allowed to have a dE over 3. One measurement value on the chart may have a value of dE 5. If this value is exceeded it will not be possible to profile the device.

9. Process beam

This process beam should help you in orientation cases to see in which stadium the process is situated at the moment.
It's divided in:

- Communication **(device to software, software to server)**
- Repeatability **(each 10 measurements about blue and about white)**

- Accuracy **(comparison current measurement to server values)**
- Confirmation **(metrological check of the profile)**

- Conclusion **(creation of certificate)**

10. Reentry of temperature and measurement

To check the quality of the calculated profile the temperature has to be reentered again. Please don't leave too much time pass by between the first and the second measurement to keep the parameter as similar as possible.

Please note that the positioning of the second measurement should be as exactly as the first one. Only like this the accuracy of the calculated profile adjustment is warranted.

If the positioning of the two measurement acts varies too much, the result after the profiling may be worse than before.

11. Download profile

If the current profile is not available anymore because of an unexpected firmware crash, it can be load into the device without any additional profiling.

12. Explication of measurement-journal

When you finished the second measurement, you'll come to the summary. Below you get a small overview if the device was successfully certified.

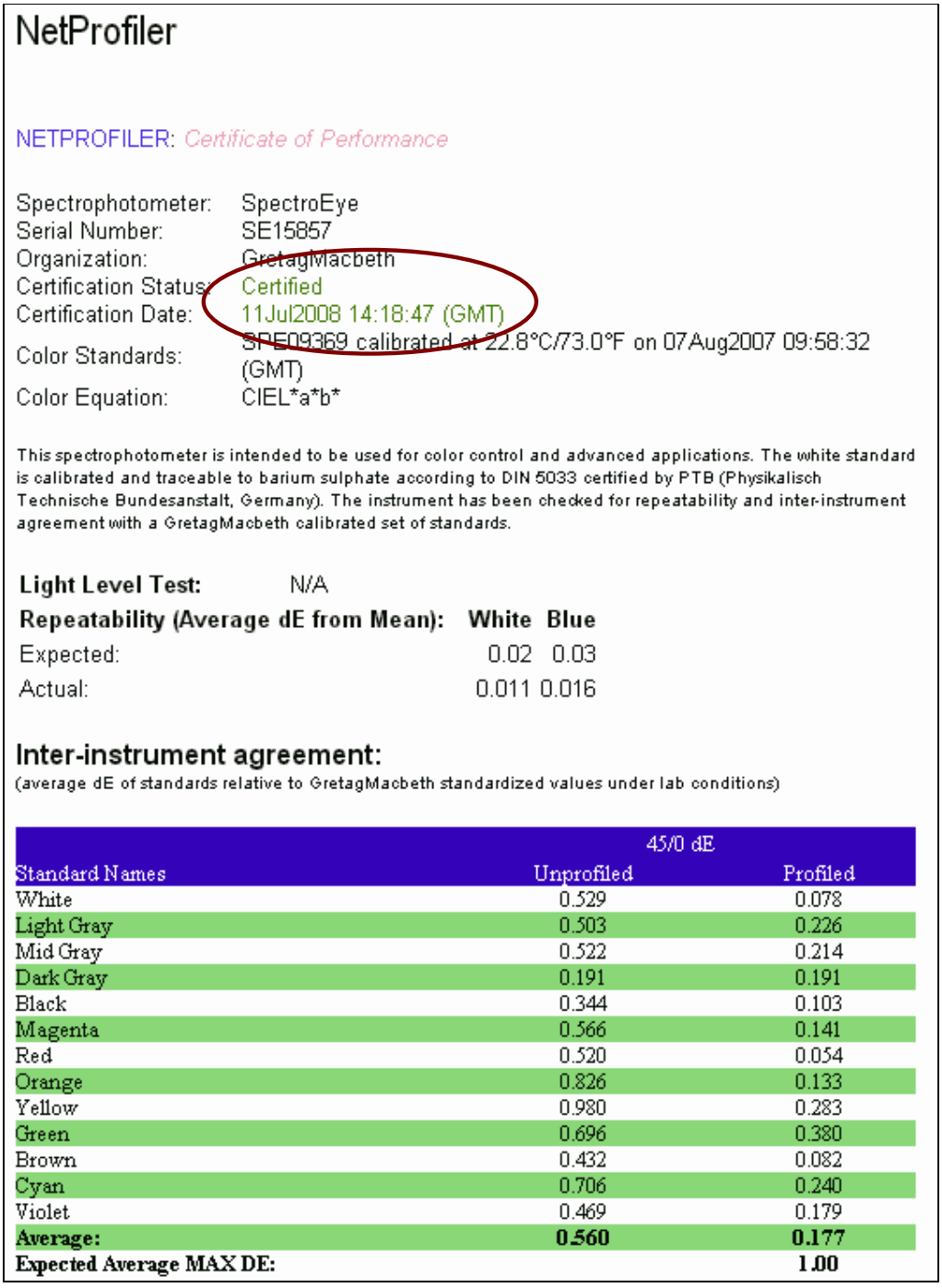
Here it shows:

- Name of the device
- Serial number
- Organization
- Status of the device
- Date of certification

Please push the button "certificate". Through this you'll come to the current document in a separate browser window.

Example 1:

Perfect result – passed repeatability test, all values can be adjusted towards down. Very good specification result.



NetProfiler

NETPROFILER: *Certificate of Performance*

Spectrophotometer:	SpectroEye
Serial Number:	SE15857
Organization:	GretagMacbeth
Certification Status:	Certified
Certification Date:	11Jul2008 14:18:47 (GMT)
Color Standards:	SPE09369 calibrated at 22.8°C/73.0°F on 07Aug2007 09:58:32 (GMT)
Color Equation:	CIEL*a*b*

This spectrophotometer is intended to be used for color control and advanced applications. The white standard is calibrated and traceable to barium sulphate according to DIN 5033 certified by PTB (Physikalisch Technische Bundesanstalt, Germany). The instrument has been checked for repeatability and inter-instrument agreement with a GretagMacbeth calibrated set of standards.

Light Level Test: N/A

Repeatability (Average dE from Mean):	**White**	**Blue**
Expected:	0.02	0.03
Actual:	0.011	0.016

Inter-instrument agreement:

(average dE of standards relative to GretagMacbeth standardized values under lab conditions)

	45/0 dE	
Standard Names	Unprofiled	Profiled
White	0.529	0.078
Light Gray	0.503	0.226
Mid Gray	0.522	0.214
Dark Gray	0.191	0.191
Black	0.344	0.103
Magenta	0.566	0.141
Red	0.520	0.054
Orange	0.826	0.133
Yellow	0.980	0.283
Green	0.696	0.380
Brown	0.432	0.082
Cyan	0.706	0.240
Violet	0.469	0.179
Average:	**0.560**	**0.177**
Expected Average MAX DE:		**1.00**

Example 2:

Bad result – failed the repeatability test. Although the values may be adjusted, the result is not reproducible. Therefore the instrument has to be repaired.

NetProfiler

NETPROFILER: *Certificate of Performance*

Spectrophotometer:	SpectroEye
Serial Number:	SE14441
Organization:	Advanced Printing Aschersleben GmbH
Certification Status:	Failed Certification
Certification Date:	19Dec2006 10:02:33 (GMT)
Color Standards:	SPE00320 calibrated at 22.8°C/73.0°F on 06Dec2006 10:03:45 (GMT)
Color Equation:	CIEL*a*b*

This spectrophotometer is intended to be used for color control and advanced applications. The white standard is calibrated and traceable to barium sulphate according to DIN 5033 certified by PTB (Physikalisch Technische Bundesanstalt, Germany). The instrument has been checked for repeatability and inter-instrument agreement with a GretagMacbeth calibrated set of standards.

Light Level Test: N/A

Repeatability (Average dE from Mean):	**White**	**Blue**
Expected:	0.02	0.03
Actual:	0.05	0.02

Inter-instrument agreement:

(average dE of standards relative to GretagMacbeth standardized values under lab conditions)

	45/0 dE	
Standard Names	Unprofiled	Profiled
White	0.910	0.097
Light Gray	0.317	0.290
Mid Gray	0.387	0.471
Dark Gray	0.385	0.127
Black	0.198	0.054
Magenta	0.270	0.233
Red	0.482	0.554
Orange	0.753	0.570
Yellow	0.968	0.713
Green	0.458	0.343
Brown	0.048	0.260
Cyan	0.375	0.511
Violet	0.162	0.556
Average:	**0.439**	**0.368**
Expected Average MAX DE:		**1.00**

Example 3:

Device certified – however the profiled result is higher than the unprofiled. This is a typical example that the second measurement was worse positioned than the first.

NetProfiler

NETPROFILER: *Certificate of Performance*

Spectrophotometer:	SpectroEye
Serial Number:	SE12468
Organization:	DI-Training
Certification Status:	Certified
Certification Date:	01Feb2008 11:12:48 (GMT)
Color Standards:	SPE09369 calibrated at 22.8°C/73.0°F on 07Aug2007 09:58:32 (GMT)
Color Equation:	CIEL*a*b*

This spectrophotometer is intended to be used for color control and advanced applications. The white standard is calibrated and traceable to barium sulphate according to DIN 5033 certified by PTB (Physikalisch Technische Bundesanstalt, Germany). The instrument has been checked for repeatability and inter-instrument agreement with a GretagMacbeth calibrated set of standards.

Light Level Test:	N/A	
Repeatability (Average dE from Mean):	**White**	**Blue**
Expected:	0.02	0.03
Actual:	0.005	0.016

Inter-instrument agreement:

(average dE of standards relative to GretagMacbeth standardized values under lab conditions)

	45/0 dE	
Standard Names	Unprofiled	Profiled
White	0.068	0.023
Light Gray	0.134	0.138
Mid Gray	0.071	0.219
Dark Gray	0.220	0.067
Black	0.078	0.094
Magenta	0.495	0.361
Red	0.371	0.312
Orange	0.718	0.903
Yellow	0.107	0.166
Green	0.250	0.401
Brown	0.116	0.064
Cyan	0.124	0.149
Violet	0.182	0.179
Average:	**0.226**	**0.237**
Expected Average MAX DE:		**1.00**

Example 4:

Instrument certified – **"certification"** chosen in menu though. In this case the card is measured only once and compared with the server values. As no adjustment will be calculated, there is only one result row visible. May be used as verification of the current status of a measurement device.

NetProfiler

NETPROFILER: *Certificate of Performance*

Spectrophotometer:	SpectroEye
Serial Number:	SE11637
Organization:	GretagMacbeth
Certification Status:	Certified
Certification Date:	13Sep2007 09:11:08 (GMT)
Color Standards:	SPE09369 calibrated at 22.8°C/73.0°F on 07Aug2007 09:58:32 (GMT)
Color Equation:	CIEL*a*b*

This spectrophotometer is intended to be used for color control and advanced applications. The white standard is calibrated and traceable to barium sulphate according to DIN 5033 certified by PTB (Physikalisch Technische Bundesanstalt, Germany). The instrument has been checked for repeatability and inter-instrument agreement with a GretagMacbeth calibrated set of standards.

Light Level Test: N/A

Repeatability (Average dE from Mean):	**White**	**Blue**
Expected:	0.02	0.03
Actual:	0.013	0.016

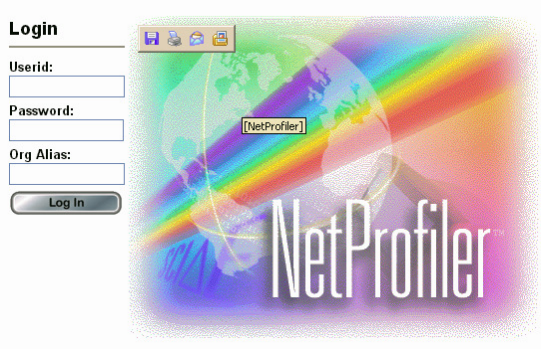
Inter-instrument agreement:

(average dE of standards relative to GretagMacbeth standardized values under lab conditions)

Standard Names	45/0 dE
White	0.123
Light Gray	0.348
Mid Gray	0.190
Dark Gray	0.435
Black	0.157
Magenta	0.255
Red	0.238
Orange	0.388
Yellow	0.578
Green	0.339
Brown	0.077
Cyan	0.172
Violet	0.228
Average:	**0.271**
Expected Average MAX DE:	**1.00**

13. Log in to the server

You can also log in directly to the NetProfiler-Server by using your log in data's.



Here you have different possibilities:

- Create a new user with its own log in data's
- Create sub-organization
- Block user
- View device certification
- View average value of several measurement devices (if available)

For further information please use our Online Help!

14. Information about NetProfiler card

- Produce in screen-print
- Homogenize color areas by high film thickness
- Monopigmented inks
- Resistant against alcohol, fat and scratches
- Light fastness WS 7-8

Per card are 26 profilings possible. You can use your card as well for several devices.

After the first usage the card is valuable for one year. After this time the card has to be replaced by a new one. Please contact your dealer to apply for a new card.

The card has to be stored in a cool and dark environment. Please put it back into the provided map after the profiling.

15. NetProfiler in the device

To use NetProfiler with the SpectroEye you have to have at least Firmware 1.70 in the device. You can check the Firmware-Version as following:

Main menu > Settings > General > Type data's

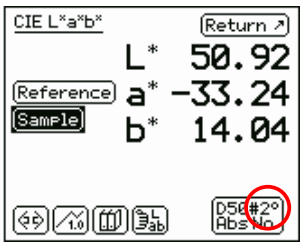
The new Firmware you'll find on our website, section SpectroEye:

(http://www.xrite.com/product_overview.aspx?ID=764&Action=support&SoftwareID=826)

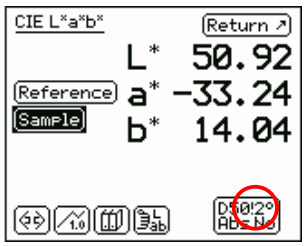
and may be downloaded to the device with the software GretagMacbeth Download Utility.

Indication of the NetProfiler adjustment

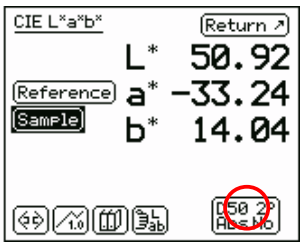
When you run the profiling of your device for the first time, the profile will be activated automatically. The symbol "**#**" in the folder Special-Icon Measurement conditions shows that the profile is activated:



Profile active



Profile active but expired

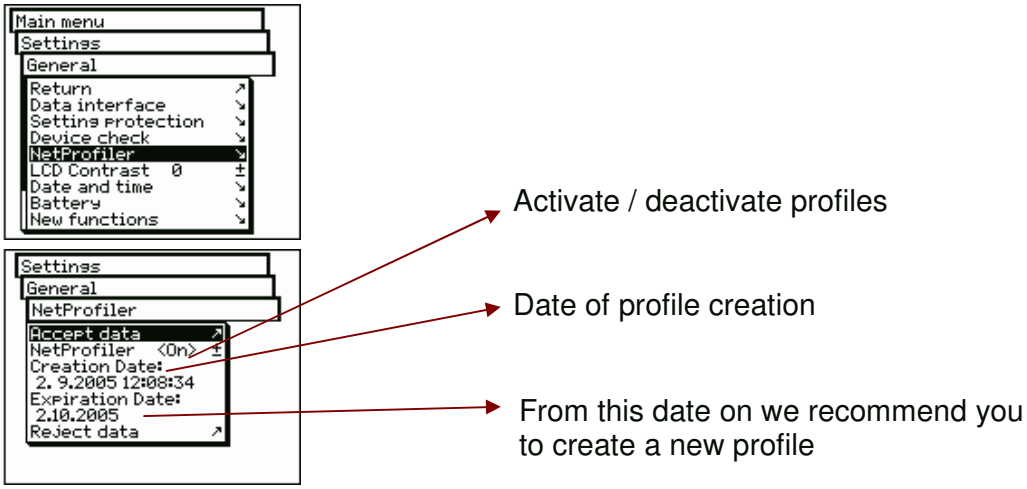


NetProfiler Off

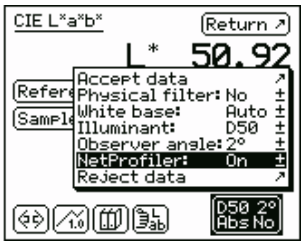
Profile information and settings

Here you find the profile information and the possibility to turn on / off the profile

Main menu > Settings > General > NetProfiler



The second possibility to turn on/off a profile provides the Special-Icon measurement conditions:

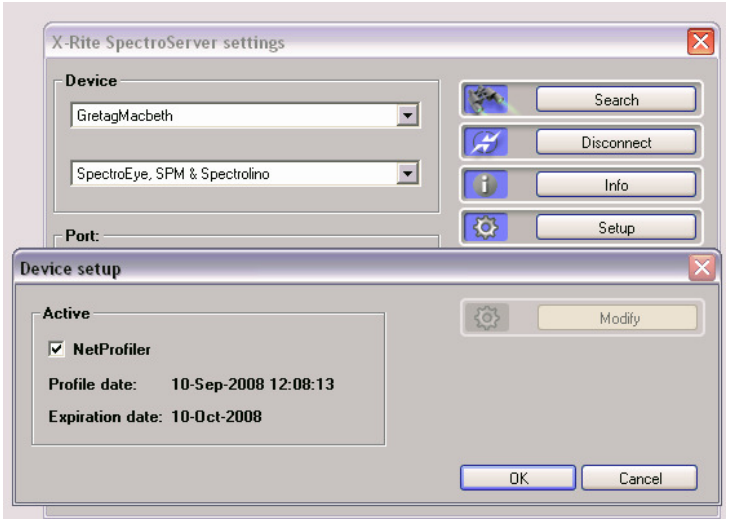


The special-Icon measurement conditions is not activated by default.
To activate it, please choose:

Main menu > Settings > User settings > Function volume > Toolbar > Symbols > Measurement conditions

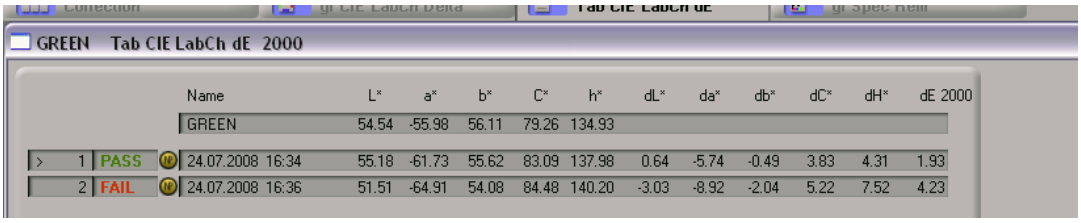
16. Netprofiler linked to X-Rite applications

Currently the programs InkFormulation and ColorQuality support working with the NetProfiler, which means that by working with these programs the NetProfiler may be deactivated by the software.
Settings > SPM > Setup



By using other programs which work with the SpectroEye, the profiled data's will be replaced from the device if a profile is active.

In ColorQuality the evaluation in tabular form shows the measurement of the NetProfiler with a little symbol.



17. Questions and proposals

If you have any further questions or proposals, please do not hesitate to contact us.
You can send us an email to:

EMEAtechsupport@xrite.com

Or you can reach our Support Team by telephone (free hotline)

☎ 00800 700 300 01

We wish you good luck with the acquired product!